

Notice of Allowability

Application No.

10/690,807

Examiner

Debra Wolfe

Applicant(s)

BROWN ET AL.

Art Unit

3725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed October 11, 2003.
2. ☒ The allowed claim(s) is/are 1, 2 and 4.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


DERRIS H. BANKS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700



NOTICE OF ALLOWABILITY

The following is an examiner's statement of reasons for allowance:

1. It is the opinion of the examiner that the art of record (considered as a whole) neither anticipates nor renders obvious "an interior cylindrical component being composed of a central inner beam, a central outer beam and coupled with a first spring, the spring being adapted to apply pressure to the outer beam to remove the work piece following manipulation and being controlled by pressure applied to the inner beam; an intermediate cylindrical component adapted to house the interior cylindrical component and having four radially spaced cylindrical control arms extending inwardly , an interior flange and exterior pair of semi-conical molding arms having a coaxial groove adjacent to a perpendicular recess within the molding arms and being adapted to receive the work piece when extended and forming the work piece when retraced; an exterior housing having a cylindrical configuration with an inner edge, an outer edge and a hollow interior being adapted to house the interior component and the intermediate component, the interior edge having a plurality of bores and a conical recess being adjacent to the exterior edge and terminating with a ledge, the conical recess being adapted to receive the molding arms of the intermediate cylindrical component; a second spring adapted to rest upon the interior flange of the intermediate component and the ledge of the exterior housing forcing the molding arm to retract, when pressure is applied to the four control arms of the intermediate component the second spring is compressed and the molding arms are extended, pressure applied to the inner beam of the interior component while the molding arms are extended will cause the outer beam to remove the working piece; and an interior end plate of a cylindrical configuration being adapted to be coupled to the bores on the inner edge of the exterior housing with a plurality of



screws, the end plate having a central aperture to allow the passage of the inner beam of the interior component and four radially spaced apertures to allow the passage of the control arms of the intermediate component, the end plate allows the system to be controlled by the exterior sources without affecting the internal parts” in combination with the rest of the claimed limitations set forth in independent claim 1.

Further searching by the examiner yielded additional prior art as follows:

2. Orloff discloses a cold forming die construction having a work piece (10), an interior cylindrical component (pin, 40), an intermediate cylindrical component comprised of an interior flange (84) and an exterior pair of semi-conical moldings (die, 68), an exterior cylinder housing comprised of a die holder (50) that is adapted to receive the die (68) and a casing (28) having bores for the movement of the three radial spaced cylindrical control arms (knockout pins 100).

3. However the above cited prior art fails to disclose an “interior beam composed of a central inner beam, a central outer beam and a first spring; an intermediate cylindrical component having four radially spaced cylindrical control arms, an exterior pair of semi-conical molding arms having a coaxial groove adjacent to a perpendicular recess within the molding arms; a second spring adapted to rest upon the interior flange of the intermediate component and the ledge of the exterior housing; and an interior end plate of a cylindrical configuration being adapted to be coupled to the bores on the inner edge of the exterior housing with a plurality of screws, a central aperture and four radially spaced apertures.” Therefore, it is concluded by the examiner that claim 1 of the present invention is allowable subject matter.

4. It is the opinion of the examiner that the art of record (considered as a whole) neither anticipates nor renders obvious “an interior cylindrical component having an inner beam and



outer beam; an exterior cylinder housing adapted to house the interior component and the intermediate component and having a ledge and a plurality of bores and a conical recess adapted to receive the molding arms of the intermediate cylindrical component; and a first spring coupled to the outer beam and a second spring adapted to rest upon the interior flange of the intermediate component and the ledge of the exterior housing forcing the molding arm to retract; and wherein when pressure is applied to the control arms of the intermediate component the second spring is compressed and the molding arms are extended, and wherein when pressure is applied to the inner beam of the interior component while the molding arms are extended the outer beam is caused to remove the working piece" in combination with the rest of the claimed limitations set forth in independent claim 2.

Further searching by the examiner yielded additional prior art as follows:

5. Orloff discloses a cold forming die construction having a work piece (10), an interior cylindrical component (pin, 40), an intermediate cylindrical component comprised of an interior flange (84) and an exterior pair of semi-conical molding arms (die, 68) and three radial spaced cylindrical control arms (knockout pins 100), an exterior cylinder housing comprised of a die holder (50) that is adapted to receive the die (68) and a casing (28) having bores for the movement of the three radial spaced cylindrical control arms (knockout pins 100).

6. However the above cited prior art fails to disclose an "interior cylindrical having an inner and outer beam with a first spring coupled to the outer beam and a second spring adapted to rest upon the interior flange of the intermediate component and the ledge of the exterior housing forcing the molding arm to retract; and wherein when pressure is applied to the control arms of the intermediate component the second spring is compressed and the molding arms are extended,



and wherein when pressure is applied to the inner beam of the interior component while the molding arms are extended the outer beam is caused to remove the working piece." Therefore, it is concluded by the examiner that independent claim 2 of the present invention is allowable subject matter.

7. It is the opinion of the examiner that the art of record (considered as a whole) neither anticipates nor renders obvious "an interior cylindrical component having an inner beam and an outer beam; and an interior end plate of a cylindrical configuration being adapted to be coupled to the bores on the inner edge of the exterior housing with a plurality of screws, the end plate having a central aperture to allow the passage of the inner beam of the interior component and four radial spaced apertures to allow the passage of the control arms of the intermediate component, the end plate adapted to allow the system to be controlled by exterior sources" in combination with the rest of the claimed limitations set forth in independent claim 3.

Further searching by the examiner yielded additional prior art as follows:

8. Orloff discloses a cold forming die construction having a work piece (10), an interior cylindrical component (pin, 40), an intermediate cylindrical component comprised of an interior flange (84) and an exterior pair of semi-conical molding arms (die, 68) and three radial spaced cylindrical control arms (knockout pins 100), an exterior cylinder housing comprised of a die holder (50) that is adapted to receive the die (68) and a casing (28) having bores for the movement of the three radial spaced cylindrical control arms (knockout pins 100).

9. However the above cited prior art fails to disclose an "interior cylindrical having an inner and outer beam; and an interior end plate of a cylindrical configuration being adapted to be coupled to the bores on the inner edge of the exterior housing with a plurality of screws, the end



plate having a central aperture to allow the passage of the inner beam of the interior component and four radial spaced apertures to allow the passage of the control arms of the intermediate component." Therefore, it is concluded by the examiner that independent claim 4 of the present invention is allowable subject matter.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Debra Wolfe whose telephone number is (571) 272-1904. The examiner can normally be reached Monday - Thursday 6am - 3:30pm with alternating Fridays 6am - 2:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached at (571) 272-4419. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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Debra Wolfe
Examiner
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A handwritten signature in black ink, appearing to read "Derris H. Banks", is positioned above the printed name.

DERRIS H. BANKS
SUPERVISORY PATENT EXAMINER
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